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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,964	08/04/2003	Kazutaka Inukai	0553-0376	5167

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EXAMINER

LESPERANCE, JEAN E

ART UNIT	PAPER NUMBER
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2629

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/633,964	Applicant(s) INUKAI, KAZUTAKA	
	Examiner Jean E Lesperance	Art Unit 2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-9 and 11-34 is/are allowed.
- 6) ☒ Claim(s) 2, 3, and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/25/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed October 25, 2006 is entered and claims 2-34 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 2 is rejected under 35 USC 102 (b) as being unpatentable over US Patent # 5,805,128 ("Kim et al.").

As per claim 2, Kim et al. teach a display device comprising a plurality of pixels arranged in a pixel portion including a plurality of pixel columns (pixel, Fig.5 (6)),

wherein pixels of the plurality of pixels Fig.5 (6) are arranged in each pixel column and two or more data lines extend (14 and 10) in each one of the pixels to simultaneously supply video signals to the pixels through the data lines (data lines extend from one driver to the other, Fig.5 (14 and 10)).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 10 are rejected under 35 USC 103 (a) as being unpatentable over US Patent # 5,805,128 ("Kim et al.") in view of US Patent application # 20020044124 ("Yamazaki et al").

As per claim 3, Kim et al. teach the pixels each have a switching element (the switching TFT is connected to the pixel 6 and the data line 10) and wherein the switching element is connected to one of the two or more data lines, which is predetermined for each pixel (the switching TFT is connected to the pixel 6 and the data line 10) (see Fig.5). Accordingly, the prior art teaches all the claimed limitations with the exception of providing a light emitting element.

However, Yamazaki et al. teach the LED region which is overlapped with a gate insulating film interposing the gate insulating film is called L.sub.ov region. The LDD region which is not overlapped with the gate insulating film is called L.sub.off region (paragraph 0174).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the LED as taught by Yamazaki et al. in the liquid crystal display disclosed by Kim et al. because this would provide a light emitting element to replace the pixel 6 of Fig.5.

As per claim 10, Yamazaki et al. teach the EL display device is also referred to as organic EL display (OELD) or an organic light emitting diode (OLED) (page 1, lines 0006) corresponding to wherein the light emitting element comprises an OLED.

Allowable Subject Matter

4. Claims 4-9 and 11-34 are allowed.
5. The following is an examiner's statement of reasons for allowance: the claimed invention is directed to a display device.

Independent claims 4, 5, 19, and 20 identify a uniquely distinct feature "at least two data drivers are provided to simultaneously supply signals to at least two pixels selected out of the plurality of pixels through the at least two data lines extending in each one of the pixel columns".

Independent claim 21 identifies a uniquely distinct feature "a second data line of the plurality of data lines is electrically connected to the second switching transistor".

Independent claim 23 identifies a uniquely distinct feature "first data driver for supplying a video signal to the pixels which are arranged in first to $m/2$ -th rows and in odd-numbered rows; a second data driver for supplying a video signal to the pixels which are arranged in first to $m/2$ -th rows and in even-numbered rows; a third data driver for supplying a video signal to the pixels which are arranged in $(m/2+1)$ -th to m -th rows and in odd-numbered rows; a fourth data driver for supplying a video signal to the pixels which are arranged in $(m/2+1)$ -th to m -th rows and in even-numbered rows".

Independent claim 24 identifies a uniquely distinct feature "a second driver for controlling the scanning line extending in the $(m+1)$ -th row; a third driver for controlling the scanning line extending in the $(m+2)$ -th row; and a fourth driver for controlling the scanning line extending in the $(m+3)$ -th row".

Independent claim 24 identifies a uniquely distinct feature "a first scanning driver for controlling the scanning lines extending in the first to $m/4$ -th rows; a second scanning driver for controlling the scanning lines extending in the $(m/4+1)$ -th row to $m/2$ -th rows; a third scanning driver for controlling the scanning lines extending in the $(m/2+1)$ -th row to $3xm/4$ -th row; a fourth scanning driver for controlling the scanning lines extending in the $(3xm/4+1)$ -th row to m -th row".

The closest arts, Yamazaki et al. and Kim et al. as discussed above, either singularly or in combination, fail to anticipate or render obvious the above limitations obvious.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (571) 272-7692. The examiner can normally be reached on from Monday to Friday between 10:00AM and 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-8300 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance



Art unit 2629

Date 11/8/2006



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600